

US EPA ARCHIVE DOCUMENT

an independent energy solutions company



Energy Savings Performance Contracting Green Servicing

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Company Overview



- Ameresco, Inc (NYSE: AMRC) is a leading independent Energy Services Company (ESCO) in North America
- Delivering long-term customer value and environmental sustainability through alternative energy solutions, energy efficiency and innovative facility renewal strategies

Experience

- Engineering-based company
- \$5 billion in Energy Solutions implemented
- 30 years experience in design, operation and management of energy supply, usage, and assets
- Award-winning expertise in energy asset development
- Independent company, not affiliated with any utility or parent company – technology and equipment neutral

Solutions

Clean. Green. Sustainable.

Energy Efficiency	Energy Supply Management	Energy Infrastructure	Renewable Energy
Energy Savings Performance Contracting	Commodity Procurement	Asset Monetization	Landfill Gas
Demand-side Management	GHG Measurement & Monetization	Plant Rehabilitation	Biogas
Demand Response	Rate Analysis & Negotiation	Facilities Management	Solar - PV and Thermal
Turnkey Design/Build	Price Risk Mitigation	On-site Cogeneration	Wind
Facility Renewal	Billing Administration	Distributed Generation	Biomass
LEED Construction	Market & Regulatory Analysis		Geothermal
Power Quality & Reliability			Hydroelectric

Energy Efficiency

Energy Savings Performance Contracts (ESPCs):

- Self-funding energy projects
- No upfront capital required
- Design and implement energy conservation measures
- Guaranteed energy savings
- Savings accrue and pay for project implementation costs

What is an ESPC?

Energy Savings Performance
Contracts bundle energy services
and infrastructure improvements:

- improving operational efficiency
- enhancing existing structures
- reducing energy consumption



Outcomes from an ESPC

- Reduced Carbon Footprint
- Facility Renewal
- Improved Efficiency:
 - Upwards of 25-45% reduced energy/water consumption
- Local Economic Impact



Energy Saving Performance Contract

- The ESPC contractor carries the contracting risk and secures third-party financing
- Projects are paid for over an agreed term with Guaranteed Energy and Operations and Maintenance Savings
- Ensures long-term measurement and verification of energy savings

ESPC is alternative-financing and enables agencies/clients to meet sustainability goals and reduce costs when appropriated funds are not available

Key Points



- Mandatory savings guarantees
- Savings must exceed payments in each year
- Measurement and verification (M&V) of savings is mandatory
- Contract term cannot exceed 25 years in the federal sector

Hill Air Force Base, Utah



\$17.7 M Comprehensive Energy Projects:

- 2,250 kW LFGTE Plant
- 210 kW PV Array
- Facility & Energy System Improvements
- First DOE BAMF Project, First LFGTE Project in Air Force and DOD, First LFGTE Project in Utah
- 20 Year Operations, Gas Purchase, and Power Purchase Agreements



Great Lakes Naval Training Center

- 1,500 buildings - 16 million sq.ft.
- Since 1997, the projects have saved 1,308,100 MBTUs of thermal energy
- Measures include:
 - New 11MW Cogeneration System
 - 4 MW backup capacity with diesel-powered generator
 - Facility-wide SCADA system for centralized control of electricity
 - Replacement of 1+ miles of steam and condensate piping, steam traps, & pipe insulation



Project Capital: \$101 M

Annual Savings: \$12 M

Boeing Company

- 20 Year Agreement
- Design-build, Own, Operate & Maintain
- High Temperature Hot Water/Chiller Water Plant
 - 5,500tons of Chiller Capacity
 - 56 MMBtu/hr of HTHW Boiler Capacity
- Fully automated, efficient and reliable operations since 2001



Huntington Beach, CA

FCI Texarkana, Texas

Federal Correctional Institution (FCI),
Texarkana, TX, houses 1,700 inmates.

Total Investment: \$10.6M

Cumulative Savings: \$34.8M over 20+ yrs

- 6 Energy Measures (EM) being implemented, including Biomass Renewable Plant.
- Will reduce carbon emissions by 4,200 tons annually.



DOE Savannah River, S.C. Biomass Cogeneration

- ❑ Largest Renewable ESPC in history
- ❑ \$795M DOE ESPC to construct a biomass cogeneration facility and two smaller biomass heating facilities
- ❑ Facility design capacity of 240,000 pounds per hour (PPH) of steam and 20 megawatts (MW) of electric power
- ❑ \$34M annual cost-savings, \$840M savings over 19 years
- ❑ Reduces greenhouse gas emissions by over 100,000 tons annually



DOE Savannah River, S.C. Biomass Cogeneration



US DOE, National Renewable Energy Laboratory

- Energy Savings Performance Contract and Renewable Energy Plant that Utilizes Local Wood Biomass
- Generates 9 MBtu/hr, or Approximately 600 Gallons Per Minute of Hot Water



Golden, CO

National Archives, Washington DC

- ESPC & Cogeneration
- \$1.2 Million Annual Savings, one square block
- Maximizing Efficiency, Water Use and Steam
- National Archives I & II



ESPCs Federal Sector

As of May 2011, more than 570 projects worth \$3.9 billion were implemented at 25 Federal agencies in 49 states and D.C.

These projects saved an estimated:

- 32.8 trillion Btu annually
- (Equal to the energy consumed by 345,000 households or a city with a population of 893,000)
- Saved \$13.1 billion in energy costs
- (Approximately \$10.1 billion goes to fund energy efficiency projects and \$3 billion is reduced Federal Government spending)

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Thank You